H 05440 10

CLAIMS

5

10

- 1. A water-based foam disinfectant containing 0.1 to 10% by weight of a surfactant system of nonionic and amphoteric surfactants capable of generating foam in contact with amines and a synergistic disinfectant component consisting of an antimicrobial agent containing amino groups and at least one other antimicrobial agent.
- 2. A foam disinfectant as claimed in claim 1, characterized in that the nonionic surfactants are selected from the groups of fatty alcohol ethoxylates and alkyl polyglycosides and the amphoteric surfactants are selected from the group of acetobetaines
- 3. A foam disinfectant as claimed in claim 2, characterized in that the surfactant system mentioned contains at least one surfactant from each of the groups of fatty alcohol ethoxylates, alkyl polyglycosides and acetobetaines.
- 4. A foam disinfectant as claimed in claim 3, characterized in that the surfactant groups of fatty alcohol ethoxylates, alkyl polyglycosides and acetobetaines mentioned are present in a quantity by weight ratio to one another of (5 to 7): (2 to 4): (0.5 to 1.5).
- 5. A foam disinfectant as claimed in one or more of claims 1 to 4, characterized in that the antimicrobial agent with amino groups mentioned is present in a total quantity of 0.001 to 10% by weight, based on the disinfectant as a whole.
 - 6. A foam disinfectant as claimed in one or more of claims 1 to 5, characterized in that the aminofunctional antimicrobial agent mentioned is selected from

alkylamines corresponding to formula(e) (I) and/or (II):

$$R^{1}$$
-NH-(CH₂)₃NH₂ (I),
 R^{1} -N-[(CH₂)₃NH₂]₂ (II),

25

where R¹ is a C₈₋₁₈ and preferably C₁₂₋₁₄ alkyl group,

which may be present in unneutralized or partly or completely neutralized form, and/or

active substances obtainable by reacting a propylenediamine 5 corresponding to formula (I):

$$R^{1}-NH-(CH_{2})_{3}NH_{2}$$
 (I)

with a glutamic acid or glutamic acid derivatives corresponding to formula (III):

$$R^2$$
-O-CO-(CH₂)₂-CH(NH₂)-COOH (III)

where R² is hydrogen or a C₁₋₄ alkyl group,

- and optionally reacting the resulting product with ethylene oxide and/or propylene oxide, optionally followed by further reaction with organic or inorganic acids.
- A foam disinfectant as claimed in one or more of claims 1 to 6, characterized in that the other antimicrobial agent mentioned is selected
 from the group of low molecular weight alcohols corresponding to formula (IV):

where R³, R⁴ and R⁵ independently of one another represent H atoms or alkyl groups containing 1 to 3 carbon atoms, the total number of carbon atoms being no greater than 6,

and/or the group of quaternary ammonium compounds.

- 8. A foam disinfectant as claimed in claim 7, characterized in that the alcohol mentioned is selected from ethanol, 1-propanol and 2-propanol.
- 9. A foam disinfectant as claimed in claim 7 or 8, characterized in that
 5 the alcohols mentioned or mixtures thereof make up in all 20 to 50% by weight of the disinfectant as a whole.
 - 10. A foam disinfectant as claimed in one or more claims 7 to 9, characterized in that it contains, based on the disinfectant as a whole,
- 0.005 to 2.0% by weight of the above-mentioned antimicrobial agent containing amino groups,
 - 20 to 40% by weight of the above-mentioned alcohol,

20

25

- 0.5 to 5% by weight of the above-mentioned surfactant system,
- 0 to 2% by weight of a quaternary ammonium compound and
- 0 to 6% by weight of typical additives, such as complexing agents and perfume.
 - 11. A process for the foam disinfection of surfaces in which a foam disinfectant according to any of claims 1 to 10 is applied to the above-mentioned surfaces in the form of a foam by means of a foam-generating unit, for example a foam spray bottle, the foam optionally being removed after a sufficient contact time by rinsing with water.
 - 12. The use of the foam disinfectant according to the any of claims 1 to 10 for the disinfection of surfaces.
 - 13. The use claimed in claim 12, characterized in that surfaces in the medical field, in the food-manufacturing and/or processing industry, in hotels, in public buildings and institutions are treated.